Course Unit Descriptor

Study Programme: Environmental Engineering And Occupational Safety Engineering
Course Unit Title: Transport and distribution of pollutants in the environment
Course Unit Code: Z578
Name of Lecturer(s): Čepić Zoran
Type and Level of Studies: bachelor
Course Status (compulsory/elective): compulsory
Semester (winter/ summer): winter
Language of instruction: english
Mode of course unit delivery (face-to-face/distance learning): face-to-face
Number of ECTS Allocated: 6
Prerequisites: none
Course Aims:. The aim of the course is to enable students to acquire theoretical and practical knowledge (through practical examples) in the field of air pollution transport phenomena.
Learning Outcomes: Students should use the acquired knowledge in further training and education, as well as in solving practical engineering problems from in the field of air pollution transport phenomena.
Syllabus. Theoretical teaching: Introductory lectures (subject of study, study levels and conservation laws). General model of diffusion. The law of conservation of mass. Current diffusion from point source. Impact of boundary conditions. Convection and diffusion of the current point source. Convection and diffusion of a continuous point source. Basics of turbulent flow and velocity profiles. Tangent tension and dispersion. Reactions, changes, and phase changes. Transport of particles. Practical teaching: the exercises accompany theoretical lessons and contribute to a better understanding of the material and complement the acquired knowledge. Practical classes include the preparation of a project assignment
Required Reading: Relevant literature in English, tbd

Weekly Contact Hours: 2	**Lectures: 3**	**Practical work: 3**

Teaching Methods:
Lectures, exercises, seminars, consultations. The lectures show the theoretical part of the material followed by characteristic examples for a better understanding of the presented material. At the exercises that follow the lectures, there are characteristic tasks and examples from practice. In addition to lectures and exercises, consultations are regularly held. In order for the student to take the exam, student should fulfill the prerequisite obligations, to regularly attend lectures and exercises and to do the project assignment..

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			